

## **Remarks**

The invention pertains to a multi-wall packaging sack for powdery materials. Powdery materials are very difficult to package since they are easily fluidized during filling of the sacks in which they are packed. Prior art packaging systems employed a kraft paper which allows air to escape during packaging, retaining the powdery material. However, these sacks were not moisture proof, and were subject to wetting and agglomeration of the contents during shipping. Improved packages were developed with a perforated plastic layer exterior to the kraft inner layer, the perforations necessary to permit passage of gas. However, the perforations still allowed some, although, less, moisture to enter the bag. Packaging methods are highly automated, and the least number of steps in the automated filling of multitudinous sacks, the more reliable and less costly is the filling process. Applicants have discovered a sack construction which allows efficient escape of air, and no sealing step of the bag sides; an air escape pathway is self sealing, not requiring any adhesive. Once self-sealed, the bag is impervious to moisture.

Claims 10 - 20 have been rejected under 35 U.S.C. § 112 ¶1 as failing to comply with the written description requirement. The Office alleges that the self-sealing limitation of claim 10 was not contained in the original specification and is new matter. This feature should be apparent from reading the entire specification, and is described in particular on page 4, lines 33 - 37 of the specification:

"the opening in the overlap region is closed by the inherent weight of the filled packaging medium, with the effect that no atmospheric moisture or spray can enter the interior through the perforation."

Thus, the inherent weight of the filled sack seals it; it is self-sealing. Although the literal words "self-sealing" may not be contained in the specification, they need not be, so long as the concept expressed by the words is so contained. See, *e.g. Fujikawa v. Wattanasin*, 39 USPQ 2d 1895, 1904 (Fed. Cir. 1996); and *Pardue Pharma L.P. v. Faulding, Inc.*, 56 USPQ 2d 1481, 1483 (Fed.

Cir. 1996) (In order to satisfy the written description requirement, the disclosure as originally filed does not have to provide *in haec verba* support for the claimed subject matter at issue). Withdrawal of the rejection of the claims under 35 U.S.C. § 112 ¶1 is respectfully solicited.

Claims 10 - 20 have been rejected over Combrink U.S. 5,493,844 ("*Combrink*") in view of Barnes et al. U.S. 4,672,684 ("*Barnes*") and Scoville U.S. 4,596,696 ("*Scoville*"). Applicants respectfully traverse this rejection.

First, the proposed combination is improper, as *Scoville* is non-analogous art. Applicants pointed this out to the Office in their last response, but apparently it went unnoticed. A non-analogous reference cannot be used to reject the claims of an application, whether alone or in combination with other references.

The standards for determining whether a reference is analogous are set forth in *In re Clay*, 23 USPQ 2d 1058 (Fed. Cir. 1992):

Two criteria have evolved for determining whether prior art is analogous: (1) whether the art is from the same field of endeavor, regardless of the problem addressed, and (2) if the reference is not within the field of the inventor's endeavor, whether the reference still is reasonably pertinent to the particular problem with which the inventor is involved. *In re Deminski*, 796 F.2d 436, 442, 230 USPQ 313, 315 (Fed. Cir. 1986); *In re Wood*, 599 F.2d 1032, 1036, 202 USPQ 171, 174 (CCPA 1979).

The PTO argues that *Sydansk* and *Clay*'s inventions are part of a common endeavor -- "maximizing withdrawal of petroleum stored in petroleum reservoirs." However, *Sydansk* cannot be considered to be within *Clay*'s field of endeavor merely because both relate to the petroleum industry.

The field of endeavor of the claimed invention is a multi-wall, sack-like packaging medium for powdery materials. See, *e.g.* the "Technological Field" section of the Background of the Invention section of the present application. *Combrink* is directed to the same field of endeavor and so is *Barnes*. *Scoville* is not, however. *Scoville* is directed to a disposable sterilizer test pack of rigid cardboard perforated with slots, and containing a "tell-tale" thermal indicator to test effectiveness of vacuum autoclave sterilization. *Scoville's* package is rigid, not sack-like, and is not designed for filling with powdery material. The field of endeavor of *Scoville* is completely different from the field of endeavor of Applicant. The first prong of the *Clay* test is not met.

The problems solved by Applicant are providing a sack with sufficient air flow through perforations through an outer wall of impermeable material during filling with powdery material, be self-sealing, and prevent ingress of moisture. The problem addressed by *Scoville* is to provide a package which establishes a constant rate of steam ingress to the inside of the test pack as an improvement over towels and packings previously used, to provide a more reliable and repeatable test method. The package of *Scoville* is purposefully designed to admit moisture. Thus, the problems addressed by Applicant and those addressed by *Scoville* are not related, and the second prong of the *Clay* test is not met. Therefore, *Scoville* is non-analogous art.

The mere fact that both the subject invention and *Scoville* are directed to "packages" does not make *Scoville* analogous. Note the second paragraph of *Clay* cited above. The field of packaging is extremely broad. One seeking to improve upon the packaging of powdery materials would not look to methods of packaging peanut butter or salted cod, for example. In all fairness, one skilled in the art of packaging powdery materials would not look to a cardboard box test pack for autoclave sterilization. *Scoville* is a non-analogous reference. Withdrawal of the rejection of the claims over *Combrink* in view of *Barnes* and *Scoville* is therefore respectfully solicited.

While the three cited references are not legally combinable because *Scoville* is a non-analogous reference, the combination, even though improper, does not teach or suggest the claimed invention.

First, the references cannot be physically combined. With respect to *Scoville*, for example, *Scoville* discloses a box of paperboard stock. The "cardboard" is necessary, according to *Scoville*, to preserve the definition of the shape of the box (col. 4, lines 15 - 22). The box also has a polymer film on the inside of the box, laminated to the paperboard. These are two of the salient features of *Scoville*. It is well established that one cannot pick and choose only so much from a reference to support a rejection while ignoring the salient features of a reference. The reference must be viewed as a whole. See, e.g. *In re Wesslau*, 147 USPQ 391 (CCPA 1965):

The ever present question in cases within the ambit of 35 U.S.C. 103 is whether the subject matter as a whole would have been obvious to one of ordinary skill in the art following the teachings of the prior art at the time the invention was made. It is impermissible within the framework of section 103 to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art. (emphasis added)

*Wesslau* at 393. This has been the law for almost half a century. Thus, any combination of *Scoville* with another reference or with other references must contain these features and the other salient features of *Scoville* as well. These are 1) rigid paperboard shape-retaining exterior; 2) polymer film laminated to the interior surfaces of the paperboard; 3) holes and slots through the laminated exterior such that both layers are permeable to air and steam (col. 4, lines 32 - 35; claim 1; column 7, lines 47 - 51). However, if these salient features are retained in the combination of references, as *Wesslau* requires, the combination would be far from that claimed. The product would be a rigid box having a moisture and air permeable outer layer and an interior polymer film, with perforations through both. The claimed invention requires an outer polymer film, which is impervious to air and moisture, which is free of perforations. The combination of *Scoville* with *Combrink* and *Barnes* cannot possibly teach or suggest the claimed invention.

However, even disregarding these deficiencies, there are further non-obvious differences between the claimed invention and the combination of references. For example a main difference between *Combrink* and the present invention is that *Combrink* does not teach the self-sealing characteristic of the present invention. Fig. 1 of *Combrink* clearly shows that 100% of the overlapping region is perforated (Col. 5, lines 57 - 60: "The lower material layer 14 is provided between the longitudinal seams 16, 19 in the overlap zone 13 with a perforation 20..."). That means the whole overlapping zone is perforated. The overlapping region is closed over the whole length on the left side with the longitudinal seam 16. But on the right side of the overlapping region, the longitudinal seam 19 is left continuously open (col. 5, lines 53 - 56). To prevent penetration of moisture during storage, the initially open longitudinal seam 19 contains a strip-shaped hot-melt adhesive, which is activated through heat for sealing the seam 19 (col. 6, lines 9 - 14). This is not self-sealing. The bag does not seal itself through the weight of its contents.

In its analysis of the *Combrink* disclosure, the Office is completely wrong concerning the design of the overlapping region of *Combrink*. On page 3, lines 9 - 10 of the Office Action, the Office refers to Figure 3 and states that the joint 12 is interrupted over a continuous region which covers 10 to 50% of the total length. That is not correct - it is interrupted over the whole length! The "interruption" pointed to in the Figure transposed into the Office Action is not an interruption. First, it is the top fold of the sack and not the front or rear side as recited in the claims, and second, it is clear that the perforations extend into this area as well, as shown in Figure 2. It is noted that no perforations are shown in Figure 3. Moreover, in Figure 3, the outer layer of that embodiment is paper (27), not an impermeable film. The film in Figure 3 is on the inside, directly opposite to what is claimed.

The special feature of *Combrink* Fig. 3 (sack 22') is thus in contrast to Fig. 2 (sack 22) and Fig. 1, where the packaging container is made of a single thermoplastic film (tube) (col. 5, lines 33 - 34; column 6, lines 35 - 37), whereas in Fig. 3 the thermoplastic

material is provided with an outer paper layer (col. 7, lines 1 - 8)<sup>1</sup>. It is quite clear with respect to Fig. 3 that, as well as for sack 22 of Fig. 1 and 2, the longitudinal seam 19 is initially open over the whole length of the sack and closed by heat-sealing after filling and ventilation (col. 7, lines 12 - 19).

The second misinterpretation of *Combrink* by the Office concerns the area of perforation. On page 3, lines 14 - 15, the Office states that in *Combrink* 10 to 50% of the area of the overlap region 13 were provided with perforations 20. In the cited paragraph, column 7, lines 1 - 9, nothing related to the area of perforation is disclosed. In the further cited paragraph, column 5, lines 57 - 65, quite the opposite is disclosed - 100% of the area is perforated as discussed above, and Figs. 2 and 3 also make clear that 100% of the area is perforated.

There is nothing in *Combrink* which would motivate one skilled in the art not to heat seal the open side of the overlapping region as taught by *Combrink*, but instead to open one side of the overlapping region only partly and to perforate the overlapping region only partly, for preventing penetration of moisture even without a heat-sealing step. The Office is of opinion that *Scoville* would teach such a modification. However, he does not.

*Scoville* teaches quite a different subject - a test pack for testing the working of vacuum sterilizers (col. 1, lines 1 - 2). The test pack is composed of a box filled with a stack of sheets comprising a thermal indicator sheet T which indicates whether contact with steam has taken place (col. 3, lines 60 - 65 and col. 8, lines 40 - 45). A pre-condition for the contact of steam with the test sheet is the permeability of the box for steam, which is enabled by perforation of the box with holes or slots (col. 4, lines 32 - 35). That is quite the opposite of the concept of the present invention, which is based on preventing penetration of moisture.

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<sup>1</sup>In Applicant's invention, the outer layer is a polymer layer, not a paper layer, just the opposite of this embodiment.

On page 5, lines 11 - 13 of the Office Action, the Office cites column 7, lines 42 - 60, of *Scoville*, for making obvious the characteristics of the present invention in combination with *Combrink*. In this paragraph it is stated: ". . .good sized holes or slots must be provided in the box. . ."! This clearly indicates that the citation of *Scoville* in regard to the present invention is fundamentally wrong. *Combrink* teaches preventing penetration of moisture by closing the perforation area with heat-sealing. *Scoville* is contradictory to *Combrink* because in his test box the penetration of steam has to be optimized for testing the function of a steam sterilizer. Therefore, it makes no sense to combine these two references, and the combination would never result in the present invention.

The Office further states that *Barnes* discloses a similar sack with two layers in an overlapping region and refers to the figures of this reference. Fig. 2 in connection with col. 5, lines 55 - 62, clearly indicates that the back wall 11 of the sack is completely perforated. But the overlapping region formed by panels 12 and 13 is on the nonperforated front-side. As seen in Figure 1 in connection with column 6, lines 4 - 11, the non-perforated overlapping region forms a sleeve for filling the sack. The self-sealing mentioned in column 7, lines 45 - 50, relates to the sealing of the filling valve, but not to the sealing of the perforated area. The perforated area in the sack of *Barnes* (back wall 11) always remains uncovered and unsealed, and thus certainly cannot prevent penetration of moisture. Moisture can freely flow into the *Barnes* sack.

For obtaining a self-sealing packaging sack, particularly the combination of features d), e), and f) of the present invention is essential. *Combrink* has no intention to obtain a self-sealing sack, therefore, he closes the perforation area by heat-sealing after completion of filling. This does not make the combination of features of the present invention obvious.

Both *Scoville* and *Barnes* disclose packaging with open perforated walls. The combination of *Combrink* with *Scoville* and *Barnes* may lead an unskilled worker to remove the overlapping layer of the *Combrink* sack. That is not the claimed invention!


Withdrawal of the § 103(a) rejection over *Combrink* in view of *Barnes* and *Scoville* is solicited for these additional reasons.

Applicants submit that the claims are now in condition for Allowance, and respectfully request a Notice to that effect. If the Examiner believes that further discussion will advance the prosecution of the Application, the Examiner is highly encouraged to telephone Applicants' attorney at the number given below.

Please charge any fees or credit any overpayments as a result of the filing of this paper to our Deposit Account No. 02-3978.

Respectfully submitted,

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